

## TELCO SYSTEMS

# XM-8102



## Cost-Effective High-Performance Mobile Backhaul Aggregation

The **XM-8102**, part of the X-Series, is designed for **cost-effective mobile backhaul aggregation** and Ethernet services. It delivers robust performance with **2×100G/40G ports** and **24×10G/1G/100M ports**, ensuring high-capacity, reliable network operations for service providers.

With **Layer 2/3 VPN support, MPLS**, and **comprehensive OAM tools**, the XM-8102 is ideal for critical mobile backhaul applications and enterprise connectivity.

### Highlights

#### Cost-Effective Design

Provides high performance at an affordable price, supporting 2×100G ports and 24×10G/1G ports for efficient network aggregation.

#### Compact and Efficient

1 RU form factor with a switching capacity of 640 Gbps, making it perfect for space-constrained deployments.

#### Reliable and Secure

Features LAG, MPLS redundancy, and VRRP for high availability and seamless failover, ensuring uninterrupted services.

#### Advanced Synchronization

Supports SyncE for precise clock synchronization, enabling reliable performance for critical applications.



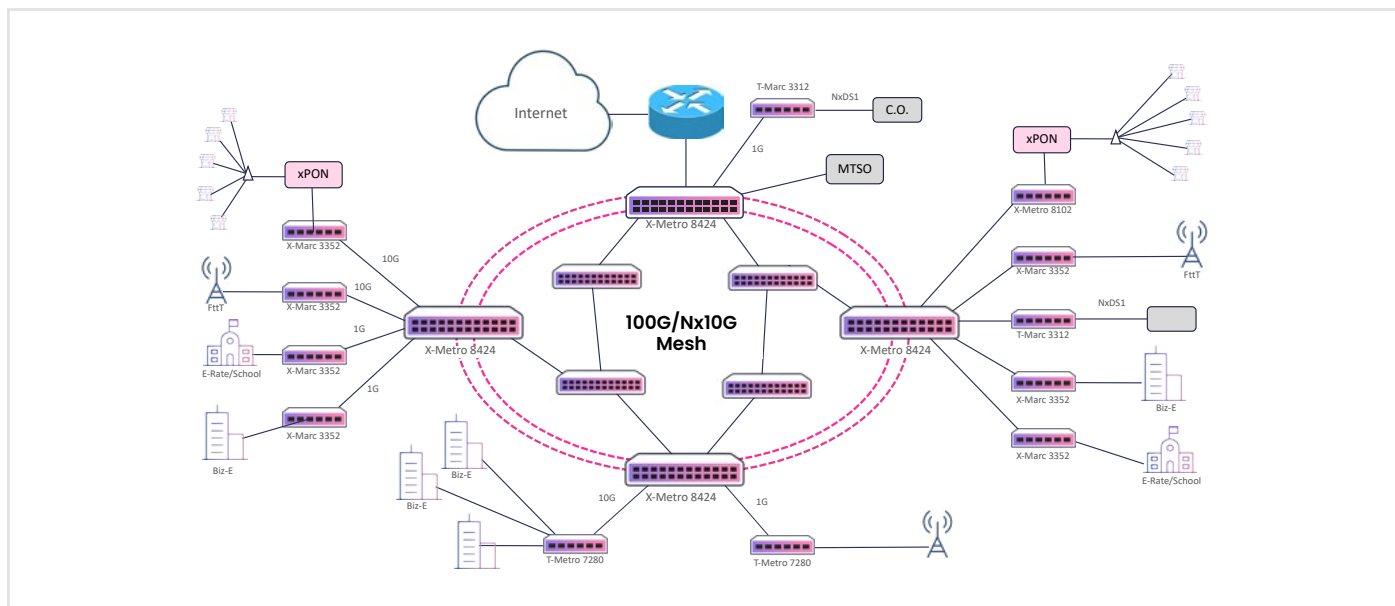
## Technical Specifications

<b>Interfaces</b>	2 × 100G/40G QSFP28/QSFP+ & 24 × 10G/1G/100M SFP+
<b>Switching Capacity</b>	640 Gbps
<b>Latency</b>	Sub-1 microsecond switching latency
<b>Management</b>	CLI, SNMP, Web-based GUI, REST API
<b>QoS Features</b>	8 hardware queues per port, traffic shaping
<b>Security</b>	802.1x, ACLs, encryption (MACsec)
<b>Redundancy</b>	Dual redundant power supplies, failover
<b>Power Supply</b>	100-240V AC, 48-60V DC
<b>Enclosure Type</b>	1U, 19" rack-mountable
<b>Dimensions (WxDxH)</b>	44 cm x 36 cm x 4.4 cm   17.32" x 14.17" x 1.73"
<b>Operating Temperature</b>	-5°C to +55°C
<b>Certification</b>	MEF 2.0, CE 2.0, RoHS, CE, FCC
<b>Regulatory Compliance</b>	ZTP, SNMP v1/v2c/v3, Netconf, USB console, Telnet, SSHv2, Syslog, CPU, Memory, Voltage & Temp Monitors, Optics Digital Diagnostics

## Features and Capabilities

<b>Ethernet Services</b>	<ul style="list-style-type: none"> <li>- Supports MAC address table (32k), Jumbo frame support (up to 12288 Bytes), and 4094 VLANs</li> <li>- MEF services (E-LINE, E-LAN, E-TREE, E-ACCESS)</li> </ul>
<b>IP Services</b>	<ul style="list-style-type: none"> <li>- IPv4/v6 static routing, RIP v1/v2, OSPF v2/v3, ISIS v4/v6, BGP4/4+, SRv6, DHCP server/client/relay</li> <li>- VRF Lite for IPv4/v6</li> </ul>
<b>MPLS Services</b>	MPLS L2VPN (VPWS, VPLS, H-VPLS), L3VPN, MPLS TE, RSVP-TE, MPLS Fast Reroute (FRR), LDP SR-MPLS, 6PE/6vPE
<b>QoS Capabilities</b>	<ul style="list-style-type: none"> <li>- Classification based on MAC, IP, port, VLAN, CoS</li> <li>- Traffic shaping per queue/port, WRED, SP/WRR queue scheduling</li> </ul>
<b>Reliability</b>	IEEE 802.1ax Link Aggregation (LACP), ITU-T G.8031/G.8032 ERPS, VRRP, MPLS PW redundancy
<b>OAM &amp; SLA Assurance</b>	Hardware-based IEEE 802.1ag/ITU-T Y.1731, performance monitoring (LM, DM), BFD, RFC2544, Y.1564
<b>Synchronization</b>	SyncE only for high-precision timing

## Applications



### Mobile Backhaul

The XM-8102 supports **MPLS L2VPN/L3VPN services**, ensuring reliable mobile backhaul aggregation with precise synchronization for **4G/5G networks**.

### Enterprise Connectivity

Offers secure and robust **Ethernet and VPN services**, ensuring high availability and performance for enterprise network environments.

### High-Speed Broadband

Ideal for service providers delivering high-speed broadband services, including **IPTV, VoIP**, and other high-bandwidth applications..

## Ordering Information

Part Number	Description
<b>XM-8102-AC-x</b>	1U, 2x100G/40G + 24x10G/1G SFP, CE/MPLS, single swappable AC power supply
<b>XM-8102-DC</b>	1U, 2x100G/40G + 24x10G/1G SFP, CE/MPLS, single swappable DC power supply
<b>XM-8102-2AC-x</b>	1U, 2x100G/40G + 24x10G/1G SFP, CE/MPLS, dual hot-swappable AC power supply
<b>XM-8102-2DC</b>	1U, 2x100G/40G + 24x10G/1G SFP, CE/MPLS, dual hot-swappable DC power supply
<b>XM-8102-AC/DC</b>	1U, 2x100G/40G + 24x10G/1G SFP, CE/MPLS, one hot-swappable AC power supply and one hot-swappable DC power supply

### Experience the Power of the Telco Systems X-Series:

Invest in the **XM-8102** to boost your network's efficiency and scalability.

Contact Telco Systems at [sales@telco.com](mailto:sales@telco.com) to learn how the XM-8102 can transform your network.